



Wildflower-rich grassland © Paul Evans

Why should I restore a wildflower-rich grassland?

Wildflower-rich grasslands are incredibly beautiful; in the summer they are a feast of colour and sound, when they are filled with wildflowers and the buzzing of bees. These grasslands can be home to an amazing number of native wildflowers, and also provide very important nectar and pollen sources, alongside valuable nesting sites for bumblebees, butterflies, hoverflies and many other insects. Bringing back more wildflowers into our grasslands, and then managing these areas carefully will help sustain populations of a large number of insects and other wildlife into the future.

How easy is it to restore wildflower-rich grasslands?

This will vary from area to area. On some sites where wildflower species are already present, just some small changes to existing grazing or cutting management will be needed to increase their numbers and diversity. However, the more damaged the grassland, and the more wildflowers which have been lost, the greater the effort which will be required.

How do I decide what to do?

Before you start any work it is a good idea to find out a few things about your land. This will help you to select the most appropriate management techniques and ensure you are successful with your grassland restoration.

Some important things to think about before you start!

- Check to see how many and what types of wildflowers are already present on your land – you could carry out a simple survey yourself, or ask a local wildlife group if they can help. This will help you decide how to restore the grassland (see next page)
- The type and fertility of your soil will affect what you can achieve. It is sensible to take a soil sample to find out more (see [soil sampling](#)). High levels of soil phosphorous can increase grass growth making it difficult for wildflowers to thrive. In these situations it may be very difficult to restore the grassland. The pH of the soil is also very important, as it will directly affect the types of wildflower which can grow
- Consider how you will manage the grassland in the future. It is only worth spending time and money on wildflower grassland restoration if you can manage the land sympathetically for wildlife (see [grassland management](#))
- Restoration of wildflower-rich grasslands takes time. Early on you may see greater numbers of flowers, but the grassland will take much longer to recover
- If in doubt check with an expert! (see [Floralocale grasslands](#))

How can I increase the numbers of wildflowers in my grassland?

First of all try to restore the grassland by making small alterations to current management. See if you can increase wildflowers numbers and diversity by:

- **Allowing plants to flower and set seed** - delay your hay cut until late July/early August for a couple of years. On pastures reduce, or even remove grazing for a period of four to six weeks in the late spring or summer, or alternatively manage as a hay meadow for a few years, as this will increase the amount of seed produced. If your grassland is close to a wildflower-rich grassland, seed may also come in naturally from the adjacent land
- **Making space for seedling growth** - create small gaps or bare ground in the grassland sward, ideally by grazing with cattle in late summer/autumn
- **Reducing soil fertility** - grasses and other strong growing plants benefit from high levels of soil nutrients; it helps them grow very quickly and smother other wildflower species. Stopping applications of artificial fertilisers and slurry to grasslands will reduce nutrient levels and favour wildflowers. It is also worth reducing farmyard manure applications on meadows for a few years (and ceasing applications on pastures)

And how can I get more types of wildflowers?

Where there are only a few species of wildflowers left in your grassland, and attempts at restoring your grasslands through small changes to management (see above) have failed, you will probably need to add new wildflower seed onto the field.



Using cattle to restore grasslands © Paul Evans

- **Open up the sward** to create gaps for seedlings to grow. Grazing animals (particularly cattle) are good at this and they will also help trample seed into the soil. Alternatively this can be done mechanically, for example by chain harrowing
- **Reduce the growth of fast-growing grasses** (e.g. Yorkshire fog, ryegrass) by seeding of yellow/hay rattle into the grassland. This is a hemi-parasitic plant which will help stunt the growth of many grass species
- **Use native wildflower seed** - wherever possible use seed harvested from local meadows and grasslands (or green hay - see Fact Sheet 3). If you need to buy seed, use a specialist supplier (see [Floralocale](#))
- **Carry out work in stages** - try just seeding small blocks in each field (c. 10-20% of the area). Let wildflowers establish in these areas and then gradually spread out across the remaining field in later years. This will be a much cheaper option and allow you to add new species in future years



Hoverfly (*Myathropa florea*) © Rob Evans



Yellow rattle (*Rhinanthus minor*) © Dave Riseborough



Dingy skipper (*Erynnis tages*) © Roger Key



Common knapweed (*Centaurea nigra*) © Dave Riseborough



A fly (*Thecophora atra*) © Nigel Jones



Wild marjoram (*Origanum vulgare*) © Dave Riseborough

And what if grasslands have been re-seeded, fertilised or had herbicide applied - can I get wildflowers back into these?

If your grassland is mainly made up of grass species such as rye-grass, and has little or no wildflower interest (maybe some buttercup or clover), it will be currently be providing very little feeding, foraging or nesting for insects. The best option on these areas may be to create a new wildflower-rich grassland, see B-Lines Fact Sheet 3 for further information.

This is one of a series of B-Lines Fact Sheets which provides guidance as to how to restore, recreate and manage wildflower meadows and pastures. Other fact sheets include:

- Sheet 1 - **Grasslands for Insect Pollinators and other wildlife**
- Sheet 3 - **Wildflower-rich grassland creation**
- Sheet 4 - **Management of wildflower-rich grasslands for pollinators and other insects**
- Sheet 5 - **Seeding the B-Lines; selecting species and seeds**

Further useful guidance includes:

Grasslands restoration and creation for Bumblebees (see [Bumblebee Conservation Trust](#))

Restoring a grassland using green hay (see [Grasslands Trust](#))

Creating and restoring species-rich grasslands (see [Floralocale 2](#))

Suppliers and sources of British Wild Flora (see [Floralocale](#))

Sward Enhancement selection of suitable sites – TIN061 (see [Natural England](#))

Sward Enhancement: choice of methods – TIN062 – (see [Natural England 2](#))

Information on Environmental Stewardship is available from Natural England (see www.naturalengland.org.uk)

Information on the Campaign for the Farmed Environment can be found at (see www.cfeonline.org.uk)



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Supported by the Co-operative's Plan Bee Campaign
www.co-operative.coop/Plan-Bee/

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